#### Thursday, December 31, 2015

# ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY (FFO) Precision Measurement Grant Program (PMGP)

## **EXECUTIVE SUMMARY**

- Federal Agency Name: National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)
- Funding Opportunity Title: Precision Measurement Grant Program (PMGP)
- Announcement Type: Initial
- Funding Opportunity Number: 2016-NIST-PMGP-01
- Catalog of Federal Domestic Assistance (CFDA) Number: 11.609, Measurement and Engineering Research and Standards
- **Dates:** Abbreviated applications must be received no later than 5:00 p.m. Eastern Time on Tuesday, February 2, 2016 (see section IV.4.a. of this FFO). Abbreviated applications received after this deadline will not be reviewed or considered. Review of abbreviated applications and selection of finalists is expected to be completed by Tuesday, March 22, 2016. Full applications submitted through Grants.gov must be received no later than 11:59 p.m. Eastern Time, on Tuesday, May 3, 2016. Full applicants using Grants.gov should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance from 12:01 a.m. Eastern Time, Saturday, April 16, 2016 until Monday, April 18, 2016 at 6:00 a.m. Eastern Time. Applications cannot be submitted when Grants.gov is closed. Paper or e-mailed full applications must be received no later than 5:00 p.m. Eastern Time, on Tuesday, May 3, 2016. Full applications received after the respective deadline will not be reviewed or considered. Review of full applications, selection of successful applicants, and award processing is expected to be completed in August 2016. The earliest anticipated start date for awards under this FFO is expected to be October 1, 2016.

If you have been invited to submit a full application, when developing your submission timeline, please keep in mind that (1) all applicants are required to have a current registration in the System for Award Management (SAM.gov); (2) the free annual registration process in the electronic System for Award Management (SAM.gov) (see Section IV.3. and Section IV.7.b.(2).b).ii. of this FFO) may take between three and five business days, or as long as more than two weeks; and (3) electronic applicants are required to have a current registration in Grants.gov; and (4) applicants will receive a series of e-mail messages from Grants.gov over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Please note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not current at the time of the

#### award.

- **Application Submission Address:** See Section IV. in the Full Announcement Text of this FFO.
- Program Description: NIST is soliciting applications from eligible applicants to support significant research in the field of fundamental measurement or the determination of fundamental constants.
- Anticipated Funding Amounts: Approximately \$100,000 may be available to fund the first year of new multi-year awards, supporting at most two (2) projects, depending on the availability of funding, for up to three (3) years at \$50,000 per year, consistent with the multi-year funding policy described in Section II.3. of this FFO.
- Funding Instrument: Grant or cooperative agreement, as appropriate.
- Who is Eligible: Accredited institutions of higher education; hospitals; non-profit
  organizations; commercial organizations; state, local, and Indian tribal
  governments; foreign governments; organizations under the jurisdiction of foreign
  governments; international organizations; and Federal agencies with appropriate
  legal authority.
- Cost Sharing Requirements: This Program does not require cost sharing.

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#### **FULL ANNOUNCEMENT TEXT**

# I. Program Description

The statutory authority for the Precision Measurement Grant Program (PMGP) is 15 U.S.C. § 272(b)(2), (b)(4), (b)(6), (b)(7), (b)(8), (c)(1), (c)(3), (c)(10), (c)(11), and (c)(16).

**Program Description:** Since 1970, NIST, as part of its research program, has provided funding under the Precision Measurement Grant Program (PMGP) primarily

to universities and colleges so that faculty may conduct significant research in the field of fundamental measurement or the determination of fundamental constants. NIST sponsors these research projects primarily to encourage basic, measurement-related research in universities and colleges and other research laboratories and to foster contacts between NIST scientists and those faculty members of academic institutions and other researchers who are actively engaged in such work. The PMGP also is intended to make it possible for researchers to pursue new ideas for which other sources of support may be difficult to find. There is some latitude in research topics that will be considered under the PMGP. The key requirement is that the proposed project is consistent with NIST's ongoing work in the field of basic measurement science (http://pml.nist.gov).

#### II. Federal Award Information

- 1. Funding Instrument. The funding instrument that will be used in this program is a grant or cooperative agreement. If a cooperative agreement is used, the nature of NIST's "substantial involvement" will generally be collaboration between NIST and the recipient organizations. This includes NIST collaboration with a recipient on the scope of work. Additional forms of substantial involvement that may arise are described in Chapter 5.C of the Department of Commerce Grants and Cooperative Agreements Manual, which is available at <a href="http://go.usa.gov/SNJd">http://go.usa.gov/SNJd</a>. Please note the Department of Commerce Grants and Cooperative Agreements Manual is expected to be updated after publication of this funding announcement and before awards are made under this FFO. Refer to Section VII. of this FFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- 2. Funding Availability. Approximately \$100,000 may be available to fund the first year of new multi-year awards, supporting at most two (2) projects, depending on the availability of funding, for up to three (3) years at \$50,000 per year, consistent with the multi-year funding policy described in Section II.3. of this FFO.
- 3. Multi-Year Funding Policy. When an application for a multi-year award is approved, funding will usually be provided for only the first year of the program. If a project is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the sole discretion of NIST. Continued funding will be contingent upon satisfactory performance, continued relevance to the mission and priorities of the PMGP, and the availability of funds.

#### III. Eligibility Information

1. Eligible Applicants. Eligible applicants are accredited institutions of higher education; hospitals; non-profit organizations; commercial organizations; state, local and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; international organizations; and Federal agencies with appropriate legal authority.

2. Cost Sharing or Matching. This Program does not require cost sharing.

#### IV. <u>Application Submission Information</u>

**1. Address to Request Application Package**. The application form for the abbreviated application, the SF-424, is available at <a href="www.grants.gov">www.grants.gov</a>. The SF-424 may also be requested by contacting the NIST personnel listed below:

Ms. Gail Newrock, National Institute of Standards and Technology, PMGP, 100 Bureau Drive, Mail Stop 8420, Gaithersburg, MD 20899-8420. Phone: (301) 975-3200; e-mail pmg@nist.gov)

#### 2. Content and Format of Application Submission

#### a. Required Abbreviated Application Form and Document

Abbreviated applications must be submitted under the PMGP in order to be considered for funding (see Section IV.7.b. of this FFO). The abbreviated application must contain the following:

- (1) SF-424, Application for Federal Assistance. The SF-424 must be signed by an authorized representative of the applicant organization. SF-424, Item 12, must list the FFO number 2016-NIST-PMGP-01. The list of certifications and assurances referenced in Item 21 of the SF-424 is not needed for the abbreviated application.
- (2) A word-processed document written by the applicant of no more than five (5) double-spaced pages describing the proposed project that includes sufficient information to address the evaluation criteria (see Section V.1. of this FFO).

#### b. Required Full Application Forms and Documents

Only applicants whose abbreviated applications have been selected by NIST as "finalists" and who have been requested by NIST to submit a full application are permitted to submit full applications to NIST for the PMGP (see Section IV.7.b. of this FFO). Full applications submitted by applicants that have not been selected as finalists will be returned to the applicant without review. The full application must contain the following:

(1) SF-424, Application for Federal Assistance. The SF-424 must be signed by an authorized representative of the applicant organization.

SF-424, Item 12, must list the FFO number supplied by NIST to the applicants invited to submit full applications.

For SF-424, Item 21, the list of certifications and assurances is contained in the SF-424B.

(2) SF-424A, Budget Information - Non-Construction Programs. The budget should reflect anticipated expenses for each year of the project in \$50,000 increments for up to three (3) years, considering all potential cost increases, including cost of living adjustments. Please carefully follow the directions found at <a href="http://www.grants.gov/web/grants/form-instructions/sf-424a-instructions.html">http://www.grants.gov/web/grants/form-instructions/sf-424a-instructions.html</a> when filling out this form.

The Grant Program Function or Activity on Line 1 under Column (a) should be entered as Measurement and Engineering Research and Standards. The Catalog of Federal Domestic Assistance Number in on Line 1 under Column (b) should be entered as 11.609.

- (3) SF-424B, Assurances Non-Construction Programs
- (4) CD-511, Certification Regarding Lobbying
- (5) SF-LLL, Disclosure of Lobbying Activities (if applicable)
- (6) Technical Proposal. The Technical Proposal is a word-processed document of no more than ten (10) double-spaced pages responsive to the program description (see Section I. of this FFO) and the evaluation criteria (see Section V.1. of this FFO). A suggested format is:
  - (a) **Abstract.** Provide a concise title and a 100-200 word abstract.
  - (b) **Project Narrative.** Address each of the four (4) evaluation criteria (see Section V.1. of this FFO).
  - (c) **Curriculum Vitae (CV).** Provide a CV of the principal investigator, including a list of his/her most recent and relevant publications.
  - (d) Current Support. Indicate if your research is supported by other sources of funding and make clear what NIST funds will enable the applicant to achieve that could not be achieved with the other sources of funds.
  - (e) **Similar Research Applications.** Provide a list of all current and pending applications for similar research, including the amounts requested and the source that was or is considering them.
- (7) Budget Narrative. There is no set format for the Budget Narrative; however, it should provide a breakdown of each of the object class categories as reflected on the SF-424A for each year.
- (8) Indirect Cost Rate Agreement. If indirect costs are included in the proposed budget, provide a copy of the approved negotiated agreement if this rate was negotiated with a cognizant Federal audit agency. If the rate was not established by a cognizant Federal audit agency, provide a statement to this effect. If the successful applicant includes indirect costs

in the budget and has not established an indirect cost rate with a cognizant Federal audit agency, the applicant will be required to obtain such a rate in accordance with the Department of Commerce Financial Assistance Standard Terms and Conditions available at: <a href="http://go.usa.gov/hKbj">http://go.usa.gov/hKbj</a>.

Alternatively, in accordance with 2 C.F.R. § 200.414(f), applicants that have never received a negotiated indirect cost rate may elect to charge indirect costs to an award pursuant to a de minimis rate of 10 percent of modified total direct costs (MTDC), in which case a negotiated indirect cost rate agreement is not required. Applicants proposing a 10 percent de minimis rate pursuant to 2 C.F.R. § 200.414(f) should note this election as part of the budget and budget narrative portion of the application.

(9) Data Management Plan. In accordance with the Office of Science and Technology Memorandum for the Heads of Executive Departments and Agencies of February 22, 2013<sup>1</sup>, Increasing Access to the Results of Federally Funded Scientific Research, and as implemented through NIST Policy 5700.00<sup>2</sup>, Managing Public Access to Results of Federally Funded Research, and NIST Order 5701.00<sup>3</sup>, Managing Public Access to Results of Federally Funded Research, applicants should include a Data Management Plan (DMP).

The DMP is a supplementary document of not more than two pages that must include, at a minimum, a summary of proposed activities that are expected to generate data, a summary of the types of data expected to be generated by the identified activities, a plan for storage and maintenance of the data expected to be generated by the identified activities, and a plan describing whether and how data generated by the identified activities will be reviewed and made available to the public. As long as the DMP meets these NIST requirements, it may take the form specified by the applicant's institution or some other entity (e.g., the National Science Foundation<sup>4</sup> or the National Institutes of Health<sup>5</sup>). Some organizations' templates are available on the Internet<sup>6</sup>.

All applications for activities that will generate scientific data using NIST funding are required to adhere to a DMP or explain why data sharing and/or preservation are not within the scope of the project.

For the purposes of the DMP, NIST adopted the definition of "research data" at 2 C.F.R. § 200.315(e)(3) (available at <a href="http://go.usa.gov/3sZvQ">http://go.usa.gov/3sZvQ</a>)

Reasonable costs for data preservation and access may be included in the application.

<sup>1</sup> https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp\_public\_access\_memo\_2013.pdf

<sup>&</sup>lt;sup>2</sup> http://www.nist.gov/open/upload/Final-P-5700.pdf

<sup>&</sup>lt;sup>3</sup> http://www.nist.gov/open/upload/Final-O-5701\_0.pdf

<sup>4</sup> http://www.nsf.gov/bfa/dias/policy/dmp.jsp

<sup>&</sup>lt;sup>5</sup> http://grants.nih.gov/grants/policy/data\_sharing/data\_sharing\_guidance.htm

<sup>&</sup>lt;sup>6</sup> https://www.cic.net/projects/technology/shared-storage-services/data-management-plans

The sufficiency of the DMP will be considered as part of the administrative review (see Section V.3.a. of this FFO); however, the DMP will not be evaluated against any evaluation criteria.

When submitting the application electronically via Grants.gov, items IV.2.b.(1). through IV.2.b.(5). above are part of the standard application package in Grants.gov and can be completed through the download application process. Items IV.2.b.(6). through IV.2.b.(9). must be completed and attached by clicking on "Add Attachments" found in item 15 of the SF-424, Application for Federal Assistance. This will create a zip file that allows for transmittal of the documents electronically via Grants.gov. Applicants should carefully follow specific Grants.gov instructions at <a href="https://www.grants.gov">www.grants.gov</a> to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicating an application is received does not provide information about whether attachments have been received.

If submitting an application by paper or e-mail, all of the required application documents should be submitted in the order listed above.

#### c. Application Format

- (1) Application language. English.
- **(2) Double-sided copy.** For paper submissions, print on both sides of the paper (front to back counts as two (2) pages).
- (3) Facsimile submissions (fax). Will not be accepted.
- (4) Figures, graphs, images, and pictures. Should be of a size that is easily readable or viewable and may be landscape orientation.
- (5) Font. Easy to read font (10-point minimum). Smaller type may be used in figures and tables but must be clearly legible.
- **(6) Line spacing.** Double-spaced except for the forms and Budget Narrative, which should be single-spaced.
- (7) Margins. One (1) inch top, bottom, left, and right.
- (8) Number of paper copies. For paper submissions, one (1) signed stapled original. If submitting electronically via e-mail or through Grants.gov, paper copies are not required. Although applicants submitting paper applications are not required to submit more than one (1) copy of the application, the normal review process for the PMGP utilizes ten (10) copies. Therefore, applicants may submit sufficient application copies for the full review process if they wish. If the original application is in color, the additional copies must also be in color.
- (9) Page layout. Portrait orientation only (except figures, graphs, and pictures (see Section IV.2.c.(4)).

(10) Page Limit. Abbreviated applications are limited to five (5) pages, and full applications are limited to ten (10) pages.

**Page limit includes**: Table of contents (if included), Technical Proposal with all required information included, including CVs, figures, graphs, tables, images, pictures, and references.

**Page limit excludes**: SF-424, Application for Federal Assistance; SF-424A, Budget Information – Non-Construction Programs; SF-424B, Assurances – Non-Construction Programs; SF-LLL, Disclosure of Lobbying Activities; CD-511, Certification Regarding Lobbying; Budget Narrative; Indirect Cost Rate Agreement; and Data Management Plan;.

- (11) Page numbering. Number pages sequentially.
- (12) Paper size. 21.6 by 27.9 centimeters (8 ½ by 11 inches).
- (13) Application language. English.
- (14) Staple paper submission. For paper submissions, staple the original signed application securely with one (1) staple in the upper left-hand corner.
- (15) **Typed document.** All applications, including forms, must be typed.
- d. Application Replacement Pages. Applicants may not submit replacement pages and/or missing documents once an application has been submitted. Any revisions must be made by submission of a new application that must be received by NIST by the submission deadline.
- **e. Pre-Applications.** NIST requires **Abbreviated Applications** under the PMGP Program (see Section IV.2.a. of this FFO). The Selection Official will select from among the Abbreviated Applications a group of finalists to submit Full Applications.
- f. Certifications Regarding Federal Felony and Federal Criminal Tax Convictions, Unpaid Federal Tax Assessments and Delinquent Federal Tax Returns. In accordance with Federal appropriations law, an authorized representative of the selected applicant(s) may be required to provide certain preaward certifications regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns.
- 3. Unique Entity Identifier and System for Award Management (SAM).

  Pursuant to 2 C.F.R. part 25, applicants and recipients (as the case may be) are required to: (i) be registered in SAM before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency, unless otherwise excepted from these requirements pursuant to 2 C.F.R. § 25.110. NIST will not make a Federal award to an applicant until the

applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time that NIST is ready to make a Federal award pursuant to this FFO, NIST may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

#### 4. Submission Dates and Times

- **a. Abbreviated Applications.** Abbreviated applications must be received by NIST no later than 5:00 p.m. Eastern Time on Tuesday, February 2, 2016. This deadline applies to all modes of abbreviated application submission, including email, U.S. Postal Service standard delivery, courier services, and express mailing.
- b. Full Applications. Full applications submitted through Grants.gov must be received no later than 11:59 p.m. Eastern Time, on Tuesday, May 3, 2016. Otherwise, full applications must be received no later than 5:00 p.m. Eastern Time, on Tuesday, May 3, 2016. This latter deadline applies to all modes of full application submission, including e-mail, U.S. Postal Service standard delivery, courier services, and express mailing.

Full applicants using Grants.gov should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance from 12:01 a.m. Eastern Time, Saturday, April 16, 2016 until Monday, April 18, 2016 at 6:00 a.m. Eastern Time. Applications cannot be submitted when Grants.gov is closed.

Abbreviated and full applications not received by the specified due dates and times will not be considered and will be returned without review. NIST determines whether the abbreviated and full applications submitted by paper have been timely received by the deadline by the date and time receipt they are physically received by NIST at its Gaithersburg, Maryland campus. For abbreviated and full application submissions via e-mail, NIST will consider the date and time of the e-mail. For full application submissions via Grants.gov, NIST will consider the date and time recorded by <a href="https://www.grants.gov">www.grants.gov</a> as the official time that the application was received by NIST. **Applicants are cautioned that the validation process may take up to two full business days after the application is submitted to Grants.gov.** 

NIST strongly recommends that applicants do not wait until the last minute to submit an application. NIST will not make allowance for any late submissions. The responsibility for ensuring a complete application is received by NIST by the deadline rests solely with the applicant. To avoid any potential processing backlogs due to last minute Grants.gov registrations, applicants are strongly encouraged to start their Grants.gov registration process at least four (4) weeks prior to the application due date.

If you have been invited to submit a full application, when developing your submission timeline, please keep in mind that (1) all applicants are required to have a current registration in the System for Award Management (SAM.gov); (2)

the free annual registration process in the electronic System for Award Management (SAM.gov) (see Section IV.3. and Section IV.7.b.(2).(b).ii. of this FFO) may take between three and five business days, or as long as more than two weeks; and (3) electronic applicants are required to have a current registration in Grants.gov; and (4) applicants will receive a series of e-mail messages from Grants.gov over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Please note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not current at the time of the award.

Electronic applicants will find instructions on registering with SAM.gov as part of the Grants.gov process at:

http://www.grants.gov/web/grants/applicants/organization-registration.html
Paper applicants will find instructions on registering with SAM.gov by
going to <a href="www.sam.gov">www.sam.gov</a> and choosing "Create User Account". Carefully read
Section IV.3 of this FFO to understand the steps involved.

- **5. Intergovernmental Review**. Applications under this Program are not subject to Executive Order 12372.
- **6. Funding Restrictions**. Profit or fee is not an allowable cost.
- 7. Other Submission Requirements.
- **a. Abbreviated Applications.** Abbreviated Applications may be submitted in paper format or electronically by e-mail as follows:

Paper Submission: Dr. Peter J. Mohr

National Institute of Standards and Technology NIST Precision Measurement Grant Program

100 Bureau Drive, Mail Stop 8420 Gaithersburg, MD 20899-8420

Phone: (301) 975-3217

E-mail Submission: pmg@nist.gov

- **b. Full Applications.** Applicants whose abbreviated applications are selected as finalists and who are invited by NIST to submit full applications may submit them by paper or electronically.
  - (1) Paper applications must be sent to:

Dr. Peter J. Mohr National Institute of Standards and Technology NIST Precision Measurement Grant Program 100 Bureau Drive, Mail Stop 8420 Gaithersburg, MD 20899-8420 Phone: (301) 975-3217

- (2) Electronic applications may be submitted either by e-mail or through Grants.gov as follows:
  - (a) E-mail. E-mail to pmg@nist.gov,

<u>Or</u>

- (b) **Grants.gov**. Instructions for Full Applications to announcement 2016-NIST-PMGP-01 will be sent to those invited to submit Full Applications.
  - i. Submitters of electronic applications should carefully follow specific Grants.gov instructions to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicating an application is received <u>does not provide</u> <u>information about whether attachments have been received</u>. For further information or questions regarding applying electronically for the 2016-NIST-PMGP-01 announcement, contact Christopher Hunton by phone at 301-975-5718 or by e-mail at grants@nist.gov.
  - ii. Applicants are strongly encouraged to start early and not wait until the approaching due date before logging on and reviewing the instructions for submitting an application through Grants.gov. The Grants.gov registration process must be completed before a new registrant can apply electronically. If all goes well, the registration process takes three (3) to five (5) business days. If problems are encountered, the registration process can take up to two (2) weeks or more. Applicants must have a valid unique entity identifier number and must maintain a current registration in the Federal government's primary registrant database, the System for Award Management (https://www.sam.gov/), as explained on the Grants.gov Web site. See also Section IV.3. of this FFO. After registering, it may take several days or longer from the initial log-on before a new Grants.gov system user can submit an application. Only individuals authorized as organization representatives will be able to submit the application, and the system may need time to process a submitted application. Applicants should save and print the proof of submission they receive from Grants.gov. If problems occur while using Grants.gov, the applicant is advised to (a) print any error message received and (b) call Grants.gov directly for immediate assistance. If calling from within the United States or from a U.S. territory, please call 800-518-4726. If calling from a place other than the United States or a U.S. territory, please call 606-545-5035. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk service will resume at 7:00 a.m.

- Eastern Time the day after Federal holidays. For assistance using Grants.gov, you may also contact <a href="mailto:support@grants.gov">support@grants.gov</a>.
- iii. To find instructions on submitting an application on Grants.gov, Applicants should refer to the "Applicants" tab in the banner just below the top of the <a href="https://www.grants.gov">www.grants.gov</a> home page. Clicking on the "Applicants" tab produces two exceptionally useful sources of information, Applicant Actions and Applicant Resources, which applicants are advised to review.

Applicants will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Closely following the detailed information in these subcategories will increase the likelihood of acceptance of the application by the Federal agency's electronic system.

Applicants should pay close attention to the guidance under "Applicant FAQs," as it contains information important to successful submission on Grants.gov, including essential details on the naming conventions for attachments to Grants.gov applications.

The application must be both received and validated by Grants.gov. The application is "received" when Grants.gov provides the applicant a confirmation of receipt and an application tracking number. If an applicant does not see this confirmation and tracking number, the application has not been received. After the application has been received, it must still be validated. During this process, it may be "validated" or "rejected with errors." To know whether the application was rejected with errors and the reasons why, the applicant must log in to Grants.gov, select "Applicants" from the top navigation, and select "Track my application" from the drop-down list. If the status is "rejected with errors," the applicant may still seek to correct the errors and resubmit your application before the deadline. If the applicant does not correct the errors, the application will not be forwarded to NIST by Grants.gov.

All applicants, both electronic and paper submitters, should be aware that adequate time must be factored into applicants' schedules for delivery of their application. Submitters of electronic applications are advised that volume on Grants.gov may be extremely heavy on the deadline date, and if Grants.gov is unable to accept applications electronically in a timely fashion, applicants are encouraged to exercise their option to submit applications in paper format. Submitters of paper applications should allow adequate time to ensure a paper application will be received on time, taking into account that Federal Government security screening for U.S. Postal Service mail may delay receipt of mail for up to two (2) weeks and that guaranteed express mailings and/or couriers are not always able to fulfill their guarantees.

Refer to important information in Section IV.4. Submission Dates and Times, to help ensure your application is received on time.

**c. Amendments.** Any amendments to this FFO will be announced through Grants.gov. Applicants may sign up for grants.gov FFO amendments or may request copies from Gail Newrock by telephone at (301) 975-3200 or by e-mail to pmg@nist.gov.

## V. <u>Application Review Information</u>

- **1. Evaluation Criteria**. The evaluation criteria that will be used in evaluating both abbreviated applications and full applications are as follows:
  - **a.** The importance of the proposed research What is its potential for answering some currently pressing question or of opening up a whole new area of activity?
  - b. The relationship of the proposed research to NIST's ongoing work How well does the proposed research support one of NIST's current efforts to develop a new or improved fundamental measurement method or physical standard, test the basic laws of physics, or provide an improved value for a fundamental constant? (See http://pml.nist.gov)
  - c. The feasibility of the research and the potential impact of the project/award How likely is it that significant progress can be made in a three year time period with the funds and personnel available and that the funding will enable work that would otherwise not be done?
  - **d.** The qualifications of the applicant How strongly do the educational and employment background and the quality of the research, based on recent publications, of the applicant indicate that there is a high probability that the proposed research will be carried out successfully?

Each of these factors will be given equal weight in the evaluation process.

- **2. Selection Factors.** The Selecting Official shall select applications for award based upon the rank order of the applications (see Section V.3.b.(2) of this FFO), and may select an application out of rank based on one or more of the following selection factors:
  - a. The availability of Federal funds
  - **b.** Whether the project duplicates other projects funded by DoC or by other Federal agencies.
  - **c.** Relevance to the program description (see Section I. of this FFO).
  - **d.** Variation of scientific or technical approaches or participants across funded projects.

#### 3. Review and Selection Process

Proposals, reports, documents and other information related to applications submitted to NIST and/or relating to financial assistance awards issued by NIST will be reviewed and considered by Federal employees, Federal agents and contractors, and/or by non-Federal personnel, all of which enter into appropriate nondisclosure agreements covering such information.

- a. Initial Administrative Review of Abbreviated and Full Applications. An initial review of timely received abbreviated and full applications will be conducted to determine eligibility, e.g., full applications submitted by applicants who did not submit the required abbreviated application or submitted by applicants whose abbreviated applications have not been selected by NIST as finalists; completeness; and responsiveness to this FFO and the scope of the stated program objectives. Applications determined to be ineligible, incomplete, and/or non-responsive may be eliminated from further review.
- b. Full Review of Eligible, Complete, and Responsive Abbreviated and Full Applications. Abbreviated and full applications determined to be eligible, complete, and responsive will proceed for full reviews in accordance with the review and selection process below:
  - (1) Abbreviated Applications. Each abbreviated application will be reviewed by the same eight (8) independent, objective reviewers, which will include written evaluations and scores, based on the evaluation criteria (see Section V.1. of this FFO). If non-Federal reviewers are used, the reviewers may discuss the applications with each other, but scores will be determined on an individual basis, not as a consensus. The independent reviewers will be scientists knowledgeable in the scientific areas of the Program. Each reviewer will rank the abbreviated applications based on their assigned scores. An aggregated ranking will then be derived based on reviewers' rankings. This ranking will then be provided to the Selecting Official for further consideration.

The Selecting Official, who is the Chief of the Quantum Measurement Division of the Physical Measurement Laboratory, will then select approximately four (4) to six (6) finalists based upon the rank order. The Selecting Official may select an application out of rank order based upon the selection factors in Section V.2. of this FFO.

(2) Full Applications. Each full application submitted by an applicant whose abbreviated application was selected as a finalist will be reviewed by the same eight (8) independent reviewers that reviewed the abbreviated applications. If non-Federal reviewers are used, the reviewers may discuss the applications with each other, but scores will be determined on an individual basis, not as a consensus. The reviews will include written evaluations and scores based on the same evaluation criteria (see Section V.1. of this FFO). Each reviewer will rank the full applications based on their assigned scores. An aggregated ranking will then be derived based on reviewers' rankings. This ranking will then be provided to the Selecting Official for further consideration.

The Selecting Official, who is the Chief of the Quantum Measurement Division of the Physical Measurement Laboratory, will then select funding recipients based upon the rank order. The Selecting Official may select an application out of rank order based upon the selection factors in Section V.2. of this FFO.

NIST reserves the right to negotiate the budget costs with the applicants that have been selected to receive awards, which may include requesting that the applicant remove certain costs. Additionally, NIST may request that the applicant modify objectives or work plans and provide supplemental information required by the agency prior to award. For international applications, NIST will follow applicable U.S. laws and policies. NIST also reserves the right to reject an application where information is uncovered that raises a reasonable doubt as to the responsibility of the applicant. NIST may select some, all, or none of the applications, or part(s) of any particular application. The final approval of selected applications and issuance of awards will be by the NIST Grants Officer. The award decisions of the NIST Grants Officer are final.

- c. Federal Awarding Agency Review of Risk Posed by Applicants. After applications are proposed for funding by the Selecting Official, the NIST Grants Management Division (GMD) performs pre-award risk assessments in accordance with 2 C.F.R. § 200.205, which may include a review of the financial stability of an applicant, the quality of the applicant's management systems, the history of performance, reports and finding from financial assistance audits, and/or the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. In addition, prior to making an award where the total Federal share is expected to exceed the simplified acquisition threshold (currently \$150,000), NIST GMD will review and consider the publicly available information about that applicant in the Federal Awardee Performance and Integrity Information System (FAPIIS). An applicant may, at its option, review and comment on information about itself previously entered into FAPIIS by a Federal awarding agency. As part of its review of risk posed by applicants, NIST GMD will consider any comments made by the applicant in FAPIIS in making its determination about the applicant's integrity, business ethics, and record of performance under Federal awards. Upon completion of the preaward risk assessment, the Grants Officer will make a responsibility determination concerning whether the applicant is qualified to receive the subject award and, if so, whether appropriate special conditions that correspond to the degree of risk posed by the applicant should be applied to an award.
- **4. Anticipated Announcement and Award Dates.** Awards may be made approximately in the August 2016 time frame.
- 5. Additional Information
- **a. Notification to Unsuccessful Applicants.** Unsuccessful applicants will be notified in writing.
- **b. Notification to Finalists.** Applicants whose abbreviated applications are selected by NIST as "finalists" will be notified in writing and invited by NIST to

submit full applications.

**c.** Retention of Unsuccessful Applications. An electronic copy of each non-selected application will be retained for three (3) years for record keeping purposes. After three (3) years, it will be destroyed.

#### **VI. Federal Award Administration Information**

- **1. Award Notices.** Successful applicants will receive an award package from the NIST Grants Officer. The award cover page, i.e., CD-450, Financial Assistance Award is available at <a href="http://go.usa.gov/SNMR">http://go.usa.gov/SNMR</a>.
- 2. Administrative and National Policy Requirements
- a. Uniform Administrative Requirements, Cost Principles and Audit Requirements. Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards in this program. Refer to <a href="http://go.usa.gov/SBYh">http://go.usa.gov/SByh</a> and <a href="http://go.usa.gov/SB94">http://go.usa.gov/SB94</a>.
- b. Department of Commerce Financial Assistance Standard Terms and Conditions. The Department of Commerce will apply the Financial Assistance Standard Terms and Conditions dated December 26, 2014, accessible at <a href="http://go.usa.gov/hKbi">http://go.usa.gov/hKbi</a>, to this award. Refer to Section VII. of this FFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- c. Pre-Award Notification Requirements. The Department of Commerce will apply the Pre-Award Notification Requirements for Grants and Cooperative Agreements dated December 30, 2014 (79 FR 78390), accessible at <a href="http://go.usa.gov/hKkR">http://go.usa.gov/hKkR</a>. Refer to Section VII. of this FFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- d. Funding Availability and Limitation of Liability. Funding for the program listed in this FFO is contingent upon the availability of appropriations. In no event will NIST or the Department of Commerce be responsible for application preparation costs if this program fails to receive funding or is cancelled because of agency priorities. Publication of this FFO does not oblige NIST or the Department of Commerce to award any specific project or to obligate any available funds.
- e. Collaborations with NIST Employees. All applications should include a description of any work proposed to be performed by an entity other than the applicant, and the cost of such work should ordinarily be included in the budget.
  - If an applicant proposes collaboration with NIST, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the NIST employee(s) involved, if known. Any collaboration by a NIST employee must be approved by appropriate NIST management and is

at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the application prior to the merit review. Any collaboration with an identified NIST employee that is approved by appropriate NIST management will not make an application more or less favorable in the competitive process.

f. Use of NIST Intellectual Property. If the applicant anticipates using any NIST-owned intellectual property to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no NIST employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use NIST-owned intellectual property, the applicant must comply with all statutes and regulations governing the licensing of Federal government patents and inventions, described in 35 U.S.C. §§ 200-212, 37 C.F.R. Part 401, 2 C.F.R. §200.315, and in Section D.03 of the DoC Financial Assistance Terms and Conditions dated December 26, 2014, found at <a href="http://go.usa.gov/hKbj">http://go.usa.gov/hKbj</a>. Questions about these requirements may be directed to Chief Counsel for NIST, (301) 975-2803, <a href="mist.gov">nistcounsel@nist.gov</a>.

Any use of NIST-owned intellectual property by an applicant is at the sole discretion of NIST and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.

If any inventions made in whole or in part by a NIST employee arise in the course of an award made pursuant to this FFO, the United States government may retain its ownership rights in any such invention. Licensing or other disposition of NIST's rights in such inventions will be determined solely by NIST, and include the possibility of NIST putting the intellectual property into the public domain.

g. Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects Including Software Testing. Any application that includes research activities involving human subjects, human tissue/cells, or data or recordings from or about human subjects, must satisfy the requirements of the Common Rule for the Protection of Human Subjects ("Common Rule"), codified for the Department of Commerce at 15 C.F.R. Part 27. Research activities involving human subjects who fall within one or more of the classes of vulnerable subjects found in 45 C.F.R. Part 46, Subparts B, C and D must satisfy the requirements of the applicable subpart(s). In addition, any such application that includes research activities on these subjects must be in compliance with all applicable statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other Federal agencies, all regulations, policies and guidance adopted by DHHS, the Food and Drug Administration, and other Federal agencies on these topics, and all Executive Orders and Presidential statements of policy on applicable topics. (Regulatory Resources: http://www.hhs.gov/ohrp/humansubjects/index.html which includes links to FDA regulations, but may not include all applicable regulations and policies).

NIST uses the following Common Rule definitions for research and human subjects research:

Research: A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activity.

Human Subject: A living individual <u>about</u> whom an investigator (whether professional or student) conducting research obtains data through intervention or interaction with the individual or identifiable private information.

- (1) Intervention includes both physical procedures by which data are gathered and manipulations of the subject or the subject's environment that are performed for research purposes.
- (2) *Interaction* includes communication or interpersonal contact between investigator and subject.
- (3) Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator associated with the information) in order for obtaining the information to constitute research involving human subjects.

See 15 C.F.R. § 27.102 Definitions.

1) Requirement for Federalwide Assurance. If the application is accepted for [or awarded] funding, organizations that have an IRB are required to follow the procedures of their organization for approval of exempt and non-exempt research activities that involve human subjects. Both domestic and foreign organizations performing non-exempt research activities involving human subjects will be required to have protocols approved by a cognizant, active IRB currently registered with the Office for Human Research Protections (OHRP) within the DHHS that is linked to the engaged organizations. All engaged organizations must possess a currently valid Federalwide Assurance (FWA) on file from OHRP. Information regarding how to apply for an FWA and register an IRB with OHRP can be found at http://www.hhs.gov/ohrp/assurances/index.html. NIST relies only on OHRPissued FWAs and IRB Registrations for both domestic and foreign organizations for NIST supported research involving human subjects. NIST will not issue its own FWAs or IRB Registrations for domestic or foreign organizations.

- 2) Administrative Review. NIST reserves the right to make an independent determination of whether an applicant's activities include research involving human subjects. NIST will conduct an independent administrative review of all applications accepted for funding that include research involving human subjects that were approved by a non-NIST Institutional Review Board (IRB). Research may not start until the NIST Human Subjects Protection Office (HSPO) issues institutional review approval for final action by the NIST Grants Officer. (15 C.F.R. § 27.112 Review by Institution.) If NIST determines that an application includes research activities which involve human subjects, the applicant will be required to provide additional information for review and approval. The documents required for funded proposals are listed in each section below. Most such documents will need to be produced during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be produced at an appropriate designated time post-award. If an award is issued, no research activities involving human subjects shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer issues written approval. Retroactive approvals are not permitted.
- 3) Required documents for proposal review. All applications involving human subject research must clearly indicate, by separable task, all research activities believed to be exempt or non-exempt research involving human subjects, the expected institution(s) where the research activities involving human subjects may be conducted, and the institution(s) expected to be engaged in the research activities.
  - a. Not research determination. If an activity/task involves human subjects as defined in the Common Rule, but the applicant participant(s) indicates to NIST that the activity/task is not research as defined in the Common Rule, the following information may be requested for that activity/task:
    - (1) Justification, including the rationale for the determination and such additional documentation as may be deemed necessary by NIST to review and/or support a determination that the activity/task in the application is not research as defined in the Common Rule.
    - (2) If the applicant participant(s) used a cognizant IRB that provided a determination that the activity/task is not research, a copy of that determination documentation must be provided to NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if they do not have one.

NIST will review the information submitted and may coordinate further with the applicant before determining whether the activity/task will be defined as research under the Common Rule in the applicable NIST financial assistance program or project.

**b.** Exempt research determination with no IRB. If the application appears to NIST to include exempt research activities, and the performer of the activity or the supplier and/or the receiver of the biological materials or

data from human subjects <u>does not</u> have a cognizant IRB to provide an exemption determination, the following information may be requested during the review process so that NIST can evaluate whether an exemption under the Common Rule applies (see 15 C.F.R. § 27.101(b), (c) and (d)).

- (1) The name(s) of the institution(s) where the exempt research will be conducted.
- (2) The name(s) of the institution(s) providing the biological materials or data from human subjects will be provided.
- (3) A copy of the protocol for the research to be conducted; and/or the biological materials or data from human subjects to be collected/provided, not pre-existing samples (*i.e.*, will proposed research collect only information without personal identifiable information, will biological materials or data be de-identified and when and by whom was the de-identification performed, how were the materials or data originally collected).
- (4) For pre-existing biological materials or data from human subjects, provide copies of the consent forms used for collection and a description of how the materials or data were originally collected and stripped of personal identifiers. If copies of consent forms are not available, explain.
- (5) Any additional clarifying documentation that NIST may deem necessary in order to make a determination whether the activity/task or use of biological materials or data from human subjects is exempt under the Common Rule.
- c. Research review with an IRB. If the application appears to NIST to include research activities (exempt or non-exempt) involving human subjects, and the proposed performer of the activity has a cognizant IRB registered with OHRP, and linked to their Federalwide Assurance, the following information may be requested during the review process:
  - (1) The name(s) of the institution(s) where the research will be conducted;
  - (2) The name(s) and institution(s) of the cognizant IRB(s), and the IRB registration number(s);
  - (3) The FWA number of the applicant linked to the cognizant IRB(s);
  - (4) The FWAs associated with all organizations engaged in the planned research activity/task, linked to the cognizant IRB;
  - (5) If the IRB review(s) is pending, the estimated start date for research involving human subjects;
  - (6) The IRB approval date (if currently approved for exempt or non-exempt research):
  - (7) If any of the engaged organizations has applied for or will apply for an FWA or IRB registration, those details should be clearly provided for each engaged organization.

If the application includes research activities involving human subjects to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities:

- (1) A signed (by the study principal investigator) copy of each applicable final IRB-approved protocol;
- (2) A signed and dated approval letter from the cognizant IRB(s) that includes the name of the institution housing each applicable IRB, provides the start and end dates for the approval of the research activities, and any IRB-required interim reporting or continuing review requirements;
- (3) A copy of any IRB-required application information, such as documentation of approval of special clearances (*i.e.*, biohazard, HIPAA, etc.) conflict-of-interest letters, or special training requirements;
- (4) A brief description of what portions of the IRB submitted protocol are specifically included in the application submitted to NIST, if the protocol includes tasks not included in the application, or if the protocol is supported by multiple funding sources. For protocols with multiple funding sources, NIST will not approve the study without a nonduplication-of-funding letter indicating that no other federal funds will be used to support the tasks proposed under the proposed research or ongoing project;
- (5) If a new protocol will only be submitted to an IRB if an award from NIST is issued, a draft of the proposed protocol;
- (6) Any additional clarifying documentation that NIST may request during the review process to perform the NIST administrative review of research involving human subjects. (See 15 C.F.R. § 27.112 Review by Institution.)

This clause reflects the existing NIST policy and requirements for Research Involving Human Subjects. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving human subjects, contact Anne Andrews, Director, NIST Human Subjects Protection Office (e-mail: <a href="mailto:anne.andrews@nist.gov">anne.andrews@nist.gov</a>; phone: (301) 975-5445).

h. Research Applications Involving Live Vertebrate Animals. Research Activities Involving Live Vertebrate Animals. Any application that includes research activities involving live vertebrate animals, that are being cared for, euthanized, or used by participants in the application to accomplish research goals, teaching, or testing, must meet the requirements of the Animal Welfare Act (AWA) (7 U.S.C. § 2131 et seq.), and the AWA final rules (9 C.F.R. Parts 1, 2, and 3), and if appropriate, the Good Laboratory Practice for Non-clinical Laboratory Studies (21 C.F.R. Part 58). In addition, such applications should be in compliance with the "U.S. Government Principles for Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training." The Principles and guidance on these Principles are available in the National Research Council's "Guide for the Care and Use of Laboratory Animals," which can be obtained from

National Academy Press, 500 5<sup>th</sup> Street, N.W., Department 285, Washington, DC 20055, or as a free PDF online at <a href="http://www.nap.edu/catalog/12910/guide-for-the-care-and-use-of-laboratory-animals-eighth">http://www.nap.edu/catalog/12910/guide-for-the-care-and-use-of-laboratory-animals-eighth</a>.

The following requirements do not apply to proposed research using preexisting images of animals or to research plans that do not include live animals. These regulations also do not apply to obtaining stock items from animal material suppliers (*e.g.*, tissue banks), such as cell lines and tissue samples, or from commercial food processors, where the vertebrate animal was euthanized for food purposes and not for the purpose of sample collection.

Custom Collections Harvested from Live Vertebrate Animals: NIST requires documentation for obtaining custom samples from live vertebrate animals from animal material suppliers and other organizations (*i.e.*, universities, companies, and government laboratories, etc.). Custom samples includes samples from animal material suppliers, such as when a catalog item indicates that the researcher is to specify the characteristics of the live vertebrate animal to be used, or how a sample is to be collected from the live vertebrate animal.

**Field Studies of Animals:** Some field studies of animals may be exempt under the Animal Welfare Act from full review and approval by an animal care and use committee, as determined by each institution. Field study is defined as "...a study conducted on free-living wild animals in their natural habitat." However, this term excludes any study that involves an invasive procedure or that harms or materially alters the behavior of an animal under study. Field studies, with or without invasive procedures, may also require obtaining appropriate federal or local government permits (e.g., marine mammals, endangered species etc.). If the applicant's institution requires review and approval by an animal care and use committee, NIST will require that documentation to be provided as described below.

1) Requirement for Assurance. An applicable assurance for the care and use of the live vertebrate animal(s) to be used in the proposed research is required. NIST accepts three types of assurances, as may be applicable. NIST may request documentation to confirm an assurance, if adequate confirmation is not available through an assuring organization's website.

The cognizant Institutional Animal Care and Use Committee (IACUC) where the research activity is located may hold one or more applicable assurance, including:

- Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) indicated by the OLAW assurance number, i.e., A-1234;
- USDA Animal Welfare Act certification indicated by the certification number, i.e., 12-R-3456;
- Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) indicated by providing the organization name accredited by AAALAC as listed in the AAALAC Directory of Accredited Organizations.

- 2) Administrative Review. NIST reserves the right to make an independent determination of whether an applicant's research activities involve live vertebrate animals or custom samples from, or field studies with live vertebrate animals. If NIST determines that the application includes research activities, field studies, or custom samples involving live vertebrate animals, the applicant will be required to provide additional information for review and approval. The documents required for funded proposals are listed in each section below. Some may be requested for a pre-review during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be produced at an appropriate designated time post-award. If an award is issued, no research activities involving live vertebrate animals subjects shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer issues written approval.
- 3) Required documents for proposal review. The applicant should clearly indicate in the application, by separable task, all research activities believed to include research involving live vertebrate animals and the institution(s) where the research activities involving live vertebrate animals may be conducted.

**Documentation of Research Review by an IACUC:** If the applicant's application appears to include research activities, field studies, or custom sample collections involving live vertebrate animals the following information regarding review by an applicable IACUC may be requested during the application review process:

- 1 The name(s) of the institution(s) where the research involving live vertebrate animals will be conducted and/or custom samples collected;
- 2 The assurance type and number, as applicable, for the cognizant Institutional Animal Care and Use Committee (IACUC) where the research activity is located. [For example: Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) should be indicated by the OLAW assurance number, i.e. A-1234; an USDA Animal Welfare Act certification should be indicated by the certification number i.e. 12-R-3456; and an Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) should be indicated by AAALAC.]
- 3 The IACUC approval date for the Animal Study Protocol (ASP) (if currently approved);
- 4 If the review by the cognizant IACUC is pending, the estimated- start date for research involving vertebrate animals;
- 5 If any assurances or IACUCs need to be obtained or established, that should be clearly stated.
- 6 If any special permits are required for field studies, those details should be clearly provided for each instance, or indicated as pending.

If the application includes research activities involving vertebrate animals to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities, which may also include field studies, custom sample collections involving live vertebrate animals:

- 1 A signed (by the Principal Investigator) copy of the IACUC approved ASP;
- 2 Documentation of the IACUC approval indicating the approval and expiration dates of the ASP; and
- 3 If applicable, a non-duplication-of-funding letter if the ASP is funded from several sources.
- 4 If a new ASP will only be submitted to an IACUC if an award from NIST is issued, a draft of the proposed ASP may be requested.
- 5 Any additional clarifying documentation that NIST may request during review of applications to perform the NIST administrative review of research involving live vertebrate animals.

This clause reflects the existing NIST policy for Research Involving Live Vertebrate Animals. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving live vertebrate animals, contact Linda Beth Schilling, Senior Analyst (e-mail: <a href="mailto:linda.schilling@nist.gov">linda.schilling@nist.gov</a>; phone: 301-975-2887).

i. Collaborations Making Use of Federal Facilities. All applications should include a description of any work proposed to be performed using Federal facilities.

If an applicant proposes use of NIST facilities, the statement of work should include a statement of this intention and a description of the facilities. Any use of NIST facilities must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the availability of the facilities and approval of the proposed usage. Any unapproved facility use will be stricken from the application prior to the merit review. Examples of some facilities that may be available for collaborations are listed on the following NIST Web site: <a href="http://www.nist.gov/user-facilities.cfm">http://www.nist.gov/user-facilities.cfm</a>.

#### 3. Reporting

- a. Reporting Requirements. The following reporting requirements described in Sections A.01 Performance (Technical) Reports and B.02 Financial Reports of the Department of Commerce Financial Assistance Standard Terms and Conditions dated December 26, 2014, <a href="http://go.usa.gov/hKbj">http://go.usa.gov/hKbj</a>, apply to awards in this program:
  - (1) Financial Reports. Each award recipient will be required to submit an SF-425, Federal Financial Report on a semi-annual basis for the periods ending March 31 and September 30 of each year to the NIST Grants Officer and Grants Specialist named in the award documents. Reports will be due within 30 days after the end of the reporting period.

- (2) Performance (Technical) Report. Each award recipient will be required to submit a technical progress report on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period. A final technical progress report shall be submitted within 90 days after the expiration date of the award. Two (2) copies of the Technical Progress Report shall be submitted to the Project Manager and the original report to the NIST Grants Officer and Grants Specialist named in the award documents. Technical progress reports shall contain information as prescribed in 2 C.F.R. § 200.328.
- (3) Patent and Property Reports. From time to time, and in accordance with the Uniform Administrative Requirements and other terms and conditions governing the award, the recipient may need to submit property and patent reports.
- (4) Recipient Integrity and Performance Matters. In accordance with section 872 of Public Law 110-417 (as amended; see 41 U.S.C. 2313), if the total value of a recipient's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of an award made under this FFO, then the recipient shall be subject to the requirements specified in Appendix XII to 2 C.F.R. Part 200, <a href="http://go.usa.gov/cTBwC">http://go.usa.gov/cTBwC</a>, for maintaining the currency of information reported to SAM that is made available in FAPIIS about certain civil, criminal, or administrative proceedings involving the recipient.
- b. Audit Requirements. 2 C.F.R. Subpart F, adopted by the Department of Commerce through 2 C.F.R. § 1327.101 requires any non-Federal entity (i.e., including non-profit institutions of higher education and other non-profit organizations) that expends Federal awards of \$750,000 or more in the recipient's fiscal year to conduct a single or program-specific audit in accordance with the requirements set out in the Subpart. Applicants are reminded that NIST, the DoC Office of Inspector General, or another authorized Federal agency may conduct an audit of an award at any time.
- c. Federal Funding Accountability and Transparency Act of 2006. In accordance with 2 C.F.R. Part 170, all recipients of a Federal award made on or after October 1, 2010, are required to comply with reporting requirements under the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282). In general, all recipients are responsible for reporting sub-awards of \$25,000 or more. In addition, recipients that meet certain criteria are responsible for reporting executive compensation. Applicants must ensure they have the necessary processes and systems in place to comply with the reporting requirements should they receive funding. Also see the Federal Register notice published September 14, 2010, at 75 FR 55663 available here <a href="http://go.usa.gov/hKnQ">http://go.usa.gov/hKnQ</a>.

#### VII. Federal Awarding Agency Contacts

# Questions should be directed to the following contact persons:

Subject Area	Point of Contact
Programmatic and Technical Questions	Dr. Peter J. Mohr
	Phone: (301) 975-3217
	E-mail: mohr@nist.gov
Technical Assistance with Grants.gov	Christopher Hunton
Submissions	Phone: 301-975-5718
	Fax: (301) 975-8884
	E-mail: grants@nist.gov
	Or
	Grants.gov
	Phone: (800) 518-4726
	E-mail: support@grants.gov
Grant Rules and Regulations	Nuria Martinez
	Phone: (301) 975-6215
	E-mail: nuria.martinez@nist.gov